



# Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

---

Concept Stage | Date Prepared/Updated: 06-Dec-2017 | Report No: PIDISDSC23331



**BASIC INFORMATION**

**A. Basic Project Data**

Country Bolivia	Project ID P162305	Parent Project ID (if any)	Project Name BO Wastewater Treatment and Reuse (P162305)
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date Jan 09, 2019	Estimated Board Date Mar 19, 2019	Practice Area (Lead) Water
Financing Instrument Investment Project Financing	Borrower(s) Plurinational State of Bolivia	Implementing Agency Ministry of Environment and Water (Ministerio de Medio Ambiente y Agua MMAyA)	

**Proposed Development Objective(s)**

The Project Development Objective is to reduce wastewater pollution and strengthen the capacity of the participating institutions to manage wastewater treatment systems in La Paz and Tarija.

**Financing (in USD Million)**

Financing Source	Amount
Borrower	10.00
International Bank for Reconstruction and Development	140.00
<b>Total Project Cost</b>	<b>150.00</b>

Environmental Assessment Category A-Full Assessment	Concept Review Decision Track II-The review did authorize the preparation to continue
--	--

Other Decision (as needed)

**B. Introduction and Context**

**A. Country Context**



1. **In 2015, the population of Bolivia stood at approximately 11 million – 31 percent of which lived in rural areas. Boosted by gas and mining exports and rapidly increasing public investment, economic growth averaged roughly 5 percent per year since 2004.** Strong economic growth in combination with prudent macroeconomic management has allowed for sizeable fiscal and current account surpluses. High dependence on commodity exports renders the economy, however, vulnerable to downturns in export prices and/or international demand for such exports. The rapid decline in export prices has affected the growth rate in 2016, and has resulted in fiscal and external deficits.
2. **This fast-economic growth has resulted in a substantial reduction of poverty and inequality.** Higher commodity prices, and a dynamic domestic demand allowed for a rapid reduction in unemployment, both in rural areas – where most of the poor reside – and for non-tradeable sectors in urban areas. Subsequently, the average income of the population increased rapidly from US\$ 1,007 in 2000 to US\$ 3,095 in 2015. The improvement in incomes has been especially pronounced for the bottom 40 percent, who saw their incomes increase more rapidly than the non-poor population. About 55 percent of the poor and 38 percent of the extremely poor live in urban areas.
3. **Bolivia’s geographical characteristics, socioeconomic particularities and weak institutional frameworks – both at the central and decentralized levels – render it highly vulnerable to climate change<sup>1</sup>.** The retreat of glaciers and more frequent and intense extreme weather events have had severe impacts on the welfare of Bolivia’s population and its economy. Between 2002 and 2012 the country faced 10,503 natural disasters (including 3,967 floods and 1,472 droughts) affecting over 1.1 million households.<sup>2</sup> More recently, the drought in 2016 affected 51 percent of the country’s municipalities in seven Departments. The cities of La Paz, El Alto, Cochabamba, Potosi, Oruro, and Sucre experienced water rationing that affected a large proportion of their population. Predicted impacts of climate change in the country indicate that changes in rainfall patterns, together with more extreme temperatures, will reduce water resource availability, while watershed degradation and changes in land use have an adverse impact on water quality.

## B. Sectoral and Institutional Context

4. **Although Bolivia is well endowed with renewable water resources - the spatial distribution of these resources and ongoing deterioration of water quality have introduced ever-mounting pressures on water availability.** Moreover, while Bolivia’s renewable water resources are estimated at 53,000 cubic meters per person per year<sup>3</sup>, the spatial distribution of such resources does not match population distribution resulting in significant water scarcity in the Altiplano and inter-Andean valleys where two thirds of the country’s population resides. Water quality has likewise deteriorated significantly in recent years. Although specific data is not available, the extensive mining, urbanization, disposal of untreated domestic and industrial wastewaters, rapid deforestation, overgrazing and, resulting land degradation have all contributed to water pollution.
5. **Throughout the past 15 years, Bolivia has made good progress in improving access to water supply and sanitation (WSS) services.** Access to improved water supply services (as defined for the Millennium Development Goals - MDGs) increased from 72 percent in 2001 to 84.7 percent in 2015, exceeding the country’s MDG water supply target of 81 percent. Access to improved sanitation also increased from 41.4 percent in 2001 to 57.8 percent in 2015, although it was insufficient to meet the MDG sanitation target of 64 percent and access to sewerage remains low. In 2012, only 40 percent of households were connected to a sewer system with large variations between regions. Yet, even though access to piped water and wastewater collection has increased, especially for the poorer population, the quality of the service is still not optimal. Service interruptions are common, and pipe breaks and sewer blockages are very common and signal

<sup>1</sup> World Bank (2011): Strategic Program for Climate Resilience

<sup>2</sup> World Bank, Quantitative Analysis of the Impact of Floods in Bolivia, March 2017 (mimeo)

<sup>3</sup> Note that this figure significantly surpasses the 36,000-cubic meter average for South America. AQUASTAT, FAO.



lack of effective maintenance. Despite improvements in access, the quality of water and wastewater service delivery remains a challenge, especially in areas facing water scarcity.

## The Urban Wastewater Sector

6. **The Environmental Law (*Ley de Medio Ambiente, 1992*) sets the framework for environmental management in the country and vests the main environmental management responsibilities at the national level in the Ministry of Environment and Water (MMAyA).** The law established instruments for environmental management and planning, such as licensing and monitoring. The associated water pollution regulations set maximum limits for 80 parameters in the case of receiving water bodies and 25 parameters for liquid effluents<sup>4</sup>. There is general consensus throughout the sector that current regulations set standards for too many parameters which are too stringent to be enforced

7. **In 2015, it was estimated that only 27 percent of wastewater and 39 percent of urban wastewater in cities larger than 10,000 inhabitants was treated<sup>5</sup>.** Large cities such as La Paz and Potosi have no wastewater treatment facilities whilst the treatment facilities in cities like El Alto, Oruro, Cochabamba, and Tarija are increasingly in need of upgrading and/or expansion. Metropolitan WSS master plans for the cities of La Paz, El Alto, Santa Cruz, Cochabamba and Tarija were developed and approved by the MMAyA in December 2014 to guide the expansion of WSS services, including wastewater treatment through 2036<sup>6</sup>. The upgrade and/or expansion of the wastewater treatment plants (WWTP) in El Alto, Cochabamba and Santa Cruz cities are underway; therefore, the Government has prioritized the construction of La Paz city WWTP and the upgrade and expansion of Tarija WWTP for the operation to be funded by the Bank. While the raw wastewater of La Paz city is discharged untreated into La Paz river; Tarija has a WWTP that was built around 1990 with a treatment capacity of 0.21 cubic meters per second. It is estimated the plant treats 65 percent of all wastewater generated in Tarija. The remaining wastewater collected by sewerage systems - as wastewater collection is around 87 percent - are treated in septic tanks, which are not maintained and are also overloaded; all wastewater is discharged in the Guadalquivir rivers. At present, downstream of the WWTPs, polluted water of La Paz and Guadalquivir rivers is used for irrigation with no restriction of crops.

8. The MMAyA is preparing a National Strategy for Wastewater Management and Reuse, which is a highlight of the sector's five-year strategic plan. This National Strategy seeks to address prevailing water pollution and public health issues resulting from low levels of wastewater treatment and its use for agriculture purposes by increasing wastewater treatment coverage and reuse rates. The Strategy will focus on (i) developing wastewater treatment infrastructure; (ii) managing wastewater treatment services effectively and efficiently; (iii) updating the legal and institutional frameworks; (iv) using a broader range of wastewater treatment technologies; and (v) improving public awareness on water pollution.

9. **The informal use of treated and untreated wastewater for irrigation is a common practice in Bolivia, either through direct application or diluted in natural water courses.** Urban expansion has significantly increased domestic and industrial water demand in Bolivia and wastewater is frequently reused to compensate for the ensuing lack of uncontaminated water resources. The areas under irrigation are mostly located in regions of high water stress. Wastewater is recognized as a source of water for irrigation in scenarios of water scarcity, which in the absence of regulation, raises concerns in terms of its potential impacts on the health of farmers, their families, livestock, and consumers.

<sup>4</sup> MDSMA (Ministerio de Desarrollo Sostenible y Medio Ambiente), 1995

<sup>5</sup> WSP, 2016

<sup>6</sup> MMAyA, 2014. Planes Maestros Metropolitanos de Agua Potable y Saneamiento (La Paz y El Alto, Cochabamba, Santa Cruz y Tarija)



## Institutional Context

10. **The WSS sector is made up of a large number of institutions.** The Ministry of Environment and Water (*Ministerio de Medio Ambiente y Agua* - MMAyA) and its Vice-Ministry of Drinking Water and Sanitation (*Viceministerio de Agua Potable y Saneamiento Basico* - VAPSB) are the sector authorities responsible for water and wastewater policies, technical standards and norms, and budgeting for sector investments when these are prioritized by the central government. The Vice-Ministry of Water Resources and Irrigation (*Viceministerio de Recursos Hidricos y Riego* - VRHyR) is in charge of assisting in the formulation and implementation of policies, plans and norms related to the integrated management of water resources and water basins, and developing integrated water management and irrigation programs and projects. The Vice-Ministry of Environment, Biodiversity, Climate Change and Forest Management and Diversity (*Viceministerio de Medio Ambiente, Biodiversidad, Cambios Climáticos y de Gestión y Desarrollo Forestal* - VMABCCGDF) is responsible for the formulation and implementation of policies, plans and norms for the sustainable management and protection of the natural environment. The provision of WSS services is the responsibility of municipal governments, which are also involved, alongside departmental governments, in project implementation and financing. Municipalities can provide the service directly or through *Entidades Prestadoras de Servicios Basicos de Agua y Alcantarillado* (EPSAs), which in urban areas normally adopt the structure of municipal or service cooperatives. WSS service regulation is conducted by the *Autoridad de Fiscalización y Control Social en Agua Potable y Saneamiento* (AAPS). AAPS currently regulates 60 water and wastewater utilities with highly diverse levels of financial and operational performance. Finally, sector investment programs are implemented by several national entities, including the UCP, the *Entidad Ejecutora de Medio Ambiente y Agua* (EMAGUA), and the *Fondo de Inversión Productiva y Social* (FPS), all of which have extensive experience in executing sector investments, although not necessarily with donor-funded projects.

## C. Relationship to CPF

11. **The Project will contribute to the achievement of higher level country objectives.** The Patriotic Agenda aims to achieve universal WSS coverage and no contamination of water bodies by 2025 in alignment with the newly defined Sustainable Development Goals (SDGs).

12. **The Project is fully aligned with the World Bank Country Partnership Framework<sup>7</sup>.** The Project will support *Pillar 1 of the CPF, Promoting Broad-based and Inclusive Growth*, by improving the living conditions of the country's underserved populations and contributing to the long-term goal of achieving increased access to wastewater treatment services. It will likewise support *Pillar 2 Supporting Environmental and Fiscal Sustainability and Resilience to Climate Change and Economic Shocks* as it will reduce wastewater pollution and will contribute to treated wastewater reuse in water scarce regions in Bolivia. The Project will contribute to reduce poverty through the prevention of water-related diseases related to poor water and wastewater service and its impact on productivity and income, health, cognitive development, mortality rates, educational attainment, particularly for women, children and vulnerable populations

## PROPOSED PDO/RESULTS

### A. Proposed Development Objective(s)

The Project Development Objective is to reduce wastewater pollution and strengthen the capacity of the participating institutions to manage wastewater treatment systems in La Paz and Tarija.

<sup>7</sup> Report No. 82173-BO, discussed by the Board on December 8, 2015.



## B. Key Results

Key PDO indicators will be:

- Number of people benefiting from improved wastewater treatment services disaggregated by gender
- Volume of wastewater treated and safely disposed
- Number of participating utilities with operation and maintenance plans developed and under implementation
- Treatment efficiency of key parameters in WWTPs of participating utilities
- Grievances registered related to delivery of project benefits that are actually addressed (%)

## D. Concept Description

13. The Project will support wastewater treatment investments in cities identified and prioritized in the Sector Development Plan for Basic Sanitation 2016-2020, the proposed National Strategy for Wastewater Management and Reuse, and their municipal governments that have demonstrated the willingness and financial capacity to provide funding for sub-projects financed under the Project. The proposed Project will increase wastewater treatment and reuse coverage rates so as to ultimately reduce water pollution, improve the health of populations in beneficiary areas, and contribute to building climate resilience in agricultural areas surrounding urban cities. An initial Climate Risk screening showed moderate risks for wastewater in the country; these risks are mainly linked to increased incidence of drought which will affect both the quality and quantity of wastewater to be treated.

### Component 1: Investments in Wastewater Treatment Infrastructure

14. This component will finance wastewater treatment investments in Tarija and La Paz cities. Two sub-projects will be implemented in La Paz namely the construction of a WWTP which will be a greenfield sub-project; and a network of trunk sewers and emissaries to convey the wastewater to the treatment plant. The project is estimated to directly benefit about 850,000 people. This subcomponent will also finance the preparation of pre-investment studies and detailed designs for wastewater treatment solutions in priority cities, including the required safeguards instruments and bidding documents, to promote the creation of a pipeline of projects. These detailed designs will include design elements to ensure that designs duly factor in and resulting infrastructure is resilient to climate change and disaster risks<sup>8</sup>

### Component 2: Institutional Strengthening

15. The Project will work with water utilities in La Paz and Tarija, AAPS, and the municipal and departmental governments to secure the sustainability of the new facilities and will likewise facilitate arrangements with farmer associations that use treated wastewater for irrigation. An important aim of this component will be to support (i) improved customer relations with these water utilities; (ii) increase citizen awareness of the importance and costs associated with wastewater treatment, and (iii) customer buy-in to pay tariffs to cover such costs. Both the MMAyA and the Bank intend to ensure that the scope of the National Strategy for Wastewater Management and Reuse goes beyond the traditional approach of using conventional wastewater collection and treatment solutions. To said end this component will also fund activities to support alternative wastewater treatment technologies, including (fecal) sludge management, and improved financing mechanisms.

### Component 3: Project Implementation and Monitoring Component

---

<sup>8</sup> The updated preinvestment guidelines issued in 2015 by the Vice-ministry of Public Investment (VIPFE) includes requirements related with DRM the challenge residing on how to implement them.



16. This component will finance the operational costs of the UCP to coordinate, implement, supervise and monitor the project.

## 2. Overall Risk and Explanation

17. The Project's overall risk rating is **Substantial**. The major risks that have been identified that may affect project implementation are:

- *Political and Governance. Substantial.* This risk is associated with the high turnover of heads and managers at central and line ministries which may affect the application and continuity of sector policies and project implementation.
- *Macroeconomic. Substantial.* In the CPF, the growth rate is expected to decline to around 3.6 percent in the next few years. This may have an impact on fiscal expenditures. The project includes significant funding of municipal governments (either through counterpart funding or debt repayment modalities). There is a risk that the municipal governments will lack the financial resources to comply with these funding requirements. The team will, therefore, undertake an analysis of municipal finances to determine these risks.
- *Sector Strategies and Policies. Substantial.* The sector carries its own set of risks. Some of these risks are related to limited management capacity. Another set of risks is associated with the policies that are in place in the sector. The most salient of these policy related risks are associated with the financial sustainability in service delivery resulting from low levels of cost recovery, the associated fiscal burden and subsequent lack of maintenance of wastewater treatment infrastructure, that can adversely affect the quality of services provided. A financial analysis will be undertaken to determine the risks involved and include mitigation measures to ensure that the proposed investments will be properly operated and maintained.
- *Institutional capacity for implementation and sustainability. High.* Institutional capacity and governance weaknesses are a major concern. The sector has only limited experience working with Bank projects. The Project Implementation Unit in charge of the project has no experience in managing World Bank projects.
- *Technical Design of the Project. Substantial.* In view of the large number of existing WWTPs that present operating problems, the technical design of the treatment plants in La Paz and Tarija need to ensure that they take into consideration staff and funding requirements for operation and maintenance.
- *Fiduciary. Substantial.* Transparency and accountability are weak. The Bank's "Doing Business" report of 2017 ranked Bolivia still low in the ease of doing business which has an adverse effect on the delivery of public services, with a regulatory environment that is still not very favorable to the private sector.
- *Environmental and Social. Substantial.* The overall Project impact is expected to be positive due to the improved effluent quality that will be discharged into the Gualdalquivir and La Paz Rivers, and the reduction of untreated wastewater that is presently discharged affecting surrounding surface water bodies. The proposed project has been classified as an Environmental Category A based on social and environmental considerations that include: (i) The WWTP for the city of La Paz is going to be located in the neighboring municipality of Mecapaca. Although the WWTP will be located in an area that is currently not used, it is relatively close to urban settlements; (ii) the construction of sewer trunks in La Paz to convey the wastewater to the treatment plant will probably involve the temporary reallocation of a specific number of households and businesses and diversion of public transportation,



that likely will result in temporary inconveniences; it is not clear at this stage of preparation whether the construction of sewer trunks will require resettlement; (iii) the rehabilitation and expansion of the WWTP in Tarija (including possibly some minor investments in sewer trunks) will be taken place at the current WWTP location; the land which is owned by the utility and is also located relatively close to residential neighborhoods. The Project Implementation Unit (PIU), established under the MMAyA, will be responsible for day-to-day Project implementation, including social and environmental aspects. The PIU will have a dedicated qualified team for environmental and social management, who will be responsible for the supervision of social and environmental safeguard requirements, and to follow up the compliance.

- **Stakeholders. Substantial.** The Project includes large, complex sub-projects with a subsequent high number of stakeholders involved at the central, departmental, municipal levels and utilities, which will require significant coordination.

## SAFEGUARDS

### A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

La Paz city has no wastewater treatment facility and the raw wastewater is discharged untreated into La Paz river. Two sub-projects will be implemented in La Paz, the wastewater treatment plant (WWTP) which will be a greenfield sub-project, and a network of trunk sewers and emissaries to convey the wastewater to the treatment plant. According to the metropolitan water supply and sanitation master plan for La Paz, 1.62 million people will benefit of the WWTP in 2036. The projected design wastewater flow will be 2.3 cubic meters per second. The trunk sewers and emissaries network for La Paz are estimated to be at least 42 kms. long. While the trunk sewers and emissaries to convey the wastewater from La Paz to the WWTP will be located in the municipality of La Paz, the WWTP will be located in the municipality of Mecapaca, which is downstream alongside the La Paz river. The plant will be located next to La Paz river at an estimated altitude of 3,000 meters above sea level.

The Tarija WWTP sub-project will include rehabilitation and expansion, with minor sewer trunk investment works included. Tarija has a WWTP that comprises of a set of anaerobic-facultative-maturation lagoons, which were built around 1990 with a treatment capacity of 0.21 cubic meters per second. Currently it is estimated the WWTP treats 65 percent of all wastewater generated in Tarija is overloaded, generates odors, is a breeding site for vector, and does not meet the discharge standards set by Bolivian environmental regulations. The remaining wastewater collected by sewerage systems - as wastewater collection is around 87 percent in the city - are treated in septic tanks, which are not maintained and are also overloaded. All wastewaters -treated or not- are discharged into Guadalquivir river. The metropolitan water supply and sanitation master plan of 2014 estimates the 0.45 million inhabitants to benefit of the WWTP by 2036. The expected design flow will be 0.9 cubic meters per second. All investments will be made in the municipality of Tarija, in an area where the existing WWTP is operating; the treated wastewater will be discharged into Guadalquivir river. At present, downstream of the WWTPs, polluted water of La Paz and Guadalquivir rivers is used for used for irrigation with no restriction of crops.

### B. Borrower's Institutional Capacity for Safeguard Policies

The Borrower is familiar with the World Bank environmental and social safeguards and has in place reasonable standards and procedures for accomplishing mitigation measures. Key during the preparation of the safeguard instruments will be the accompaniment and advice from the Bank, specially during consultation processes.





**C. Environmental and Social Safeguards Specialists on the Team**

Juan Carlos Enriquez Uria, Environmental Safeguards Specialist  
Angela Maria Caballero Espinoza, Social Safeguards Specialist

**D. Policies that might apply**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>Based upon the proposed project characteristics and potential impacts, the team proposes an Environmental Category of A per World Bank Operational Policy 4.01. For the trunk sewers (only for La Paz) because the final location is still unknown, an Environment and Social Management Framework (ESMF), will be prepared including social and environmental assessments, to provide guidance on potential issues that could arise during Project implementation.</p> <p>For the wastewater treatment plants (WWTPs) that will be built in urban and peri urban areas of La Paz and Tarija cities, an Environmental and social Impact Assessment (ESIA) including specific Environmental and Social Management Framework (ESMF) will be developed. These means that 1 ESMF and 2 ESIA's will be developed for the project. The final WWTPs project design and operation will comply with WBG Guidelines and Bolivian standards.</p> <p>All 3 Environmental instruments will be developed during the preparation of the final technical design.</p> <p>During the construction phase key negative environmental impacts may include: (a) removal of topsoil and changes in terrain and topography; (b) contamination by solid or liquid wastes during construction works; (c) generation of dust, combustion gases, noise and vibrations; (d) inconveniences caused by urban and traffic congestion in highly urbanized areas; (e) disturbance to daily socio-economic activities (f) alteration of urban landscape; (g) erosion and land slide risks; (h) worker health and safety; (i) health and safety issues for the workers; (j) others.</p> <p>During the operation phase, the main negative impacts could include : (a) disposal of sludge; (b)</p>



overflows; (c) health risks due to vectors; (d) odors; (e) discharge quality of WWTP effluent and its potential impact on receiving water quality; (f) inappropriate use, handling, transportation, and disposal of chemicals/hazardous materials needed for wastewater treatment (i.e. chlorine); (g) others.

As part of the ESIA's, specific environmental and social management plans (ESMP) will be formulated including: (a) Plan for Prevention and Mitigation of Impacts; (b) Handling and management Plan of Wastes; (c) Monitoring and Measurement Plan; (d) Occupational Health and Security Plan; (e) Community Relationship Plan; (f) Training Plan; (g) Contingency Plan; (h) Abandonment Plan; and, (i) Environmental Monitoring Plan.

Natural Habitats OP/BP 4.04	No	No potential significant negative impacts on natural habitats are anticipated since the sites for the WWTP and the sewer trunks are located in urban and peri urban areas. The WWRTTP discharges will not affect any sensitive natural habitat because currently the rivers in La Paz and Tarija are highly polluted.
Forests OP/BP 4.36	No	The Project works for the trunk sewers and WWTPs to be performed will be in urban and peri-urban areas. There are no forests or mangrove swamps located within or in the immediate proximity of the project intervention areas. The project will not affect forests or forest dependent communities; nor will it involve changes in the management of forests.
Pest Management OP 4.09	No	The Project does not involve the purchase or use of any significant quantities of pesticides.
Physical Cultural Resources OP/BP 4.11	Yes	The project does not anticipate to significantly impact cultural resources. This policy is triggered and screening for physical cultural resources and chance find procedures will be included in the ESMPs as a preventive measure (part of OP/BP 4.01).
Indigenous Peoples OP/BP 4.10	TBD	The project beneficiaries in the cities of La Paz and Tarija do not qualify as Indigenous Peoples as defined in the OP/BP 4.10 Indigenous Peoples, because: (i) beneficiaries do not appeal to ethnic self-identification as a marker of pertinence to a particular group in the proposed project area; (ii) they do not have collective attachment to ancestral territories and there are no evidences of traditional customs linked to land and territory where the proposed project will be implemented; (iii) they do not have other specific



economic, political, social, and cultural organizational traits, as opposed to those that belong to the regional society, and (iv) even though in domestic contexts in the city of La Paz, people still use Aymara indigenous language, it is not used as an element of group cohesion. Therefore, consistent with this analysis, the OP/BP 4.10 has not been triggered for the beneficiaries in La Paz and Tarija and an Indigenous Peoples Policy Framework and/or Indigenous Peoples Plan will not be developed, for these locations. However, to confirm if the affected people in Mecapaca can be identified as indigenous people under OP/BP 4.10 definition, too little information is available at this stage of project preparation (Only the criteria of self-identification as Aymara people has been confirmed). Considering this, it is expected that as soon as practical, the SA will produce enough information to verify the other 3 criteria of the OP/BP indigenous people definition. Once the SA has produced this information, it will be confirmed if this operational policy will be triggered and if the preparation of an IPP for Mecapaca would be needed.

In compliance with the World Bank Operational Policy Involuntary Resettlement (OP/BP 4.12), and consistent with Bolivian law, the borrower will prepare three (3) Resettlement Action Plans (RAP), one for the WWTP in La Paz, a second one for the WWTP in Tarija and a third one for the Trunk Sewer System in La Paz. In the case of Tarija, the WWTP will be rehabilitated and expanded on the existing terrains owned by the utility, and hence no resettlement is foreseen at this stage of preparation.

Involuntary Resettlement OP/BP 4.12

Yes

In the case of the WWTP for La Paz - Mecapaca, the terrain identified is vacated, and owned by the municipality. As for the sewer trunk infrastructure in La Paz, a Resettlement Policy Framework will be prepared during the project preparation phase because the exact locations will not be known by appraisal. The RAP for the sewer trunk in La Paz will be prepared during project implementation in accordance with OP 4.12.

The TT is working with the Government to define the Terms of References for the Tarija WWTP, La Paz WWTP and La Paz sewer trunk infrastructure to ensure



that the social safeguards policies are considered as part of the design process.

Safety of Dams OP/BP 4.37	No	The Project will neither support the construction or rehabilitation of dams nor will it support other investments which rely on services of existing dams.
Projects on International Waterways OP/BP 7.50	Yes	Due to the greenfield character of the La Paz wastewater treatment plant, OP7:50 will be triggered.
Projects in Disputed Areas OP/BP 7.60	No	The Project will not finance activities in disputed areas as defined in the policy.

### E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Jan 07, 2019

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

The ESMF and the two ESIA's including a summary of the consultations (two consultations will be performed for each of the studies) are expected to be publicly disclosed by November 2018. One ESMF will be prepared for the sewer trunks in La Paz. One ESIA will be prepared for the WWTP in La Paz at the Municipality of Mecapaca and a second ESIA will be prepared for the WWTP (and minor sewer trunk infrastructure works) in the city of Tarija. The preparation of the environmental and social safeguards instruments will be undertaken by Government. The TORs of this studies will be reviewed by the Bank. The environmental impact studies and ESMF are estimated to be initiated in February 2018. The social safeguard instruments are estimated to be initiated in January 2018 (Social Assessment for La Paz and Tarija, the Resettlement Policy Framework and the 2 Resettlement Policy Plans, will be disclosed before Appraisal. Consultations for the RPF will start to be undertaken after the stakeholder's mapping included in the SA has been completed (approximately between June - October 2018). Consultation for the RAPs in La Paz and Tarija that will be disclosed before appraisal will be undertaken approximately between August – October 2018).The SA, RPF and 2 RAPs for the two wastewater treatment plants will be prepared by project appraisal. The sewer trunk in La Paz will be prepared during project implementation in accordance with OP 4.12. The Safeguard instruments of the project will be prepared while the pre- investment projects are being undertaken. It is estimated that this process will begin at the same time.

### CONTACT POINT

#### World Bank

Caroline van den Berg, Luis Alfonso Alvestegui Justiniano  
Lead Water Economist

#### Borrower/Client/Recipient



Plurinational State of Bolivia  
Mariana Prado Noya  
Minister of Planning  
stephanie.bellot@planificacion.gob.bo

**Implementing Agencies**

Ministry of Environment and Water (Ministerio de Medio Ambiente y Agua MMAyA)  
Carlos Ortuño Yañez  
Minister of Environment and Water  
carlos.ortuno@riegobolivia.org

**FOR MORE INFORMATION CONTACT**

The World Bank  
1818 H Street, NW  
Washington, D.C. 20433  
Telephone: (202) 473-1000  
Web: <http://www.worldbank.org/projects>

**APPROVAL**

Task Team Leader(s):	Caroline van den Berg, Luis Alfonso Alvestegui Justiniano
----------------------	---

**Approved By**

Safeguards Advisor:	Noreen Beg	07-Dec-2017
Practice Manager/Manager:	Rita E. Cestti	07-Dec-2017
Country Director:	Boris Enrique Utria	21-Feb-2018